

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2003-005709

(43)Date of publication of application : 08.01.2003

(51)Int.Cl.

G09G 3/30

G09F 9/30

G09F 9/33

G09G 3/20

G09G 3/32

H01L 33/00

(21)Application number : 2001-187478

(71)Applicant : HITACHI LTD

(22)Date of filing : 21.06.2001

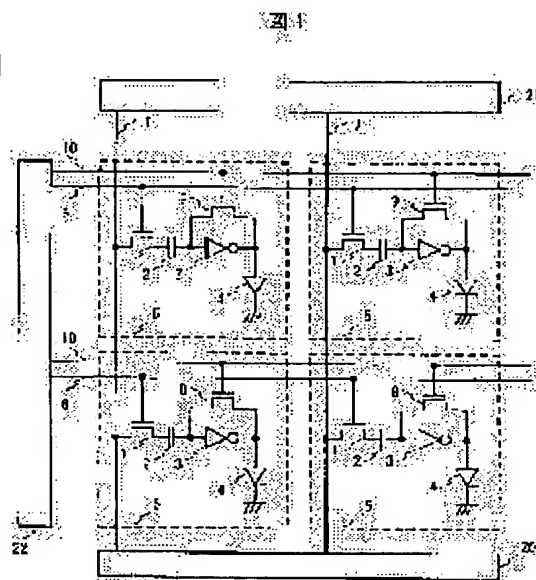
(72)Inventor : AKIMOTO HAJIME
NISHITANI SHIGEYUKI
KOMURA SHINICHI
SATO TOSHIHIRO
KAGEYAMA HIROSHI
SHIMIZU YOSHITERU

(54) IMAGE DISPLAY DEVICE

(57)Abstract:

PROBLEM TO BE SOLVED: To provide an image display device capable of performing multi-gradation level display and also in which the variation of display characteristics among pixels is sufficiently small.

SOLUTION: In the image display device having a display part which is constituted of a plurality of pixels and signal lines for inputting a display signal voltage to pixel areas, this device is a picture display device which, in at least one area of a plurality of pixel areas, has a storage means which stores the display signal voltage inputted from the signal line to the pixel area, a pixel-ON period deciding means which decides the ON period and the OFF period of the output of a pixel in the pixel area based on the display signal voltage and a pixel driving means for making the ON operation of the output of the pixel to be repeated a plurality of times in one frame.



LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

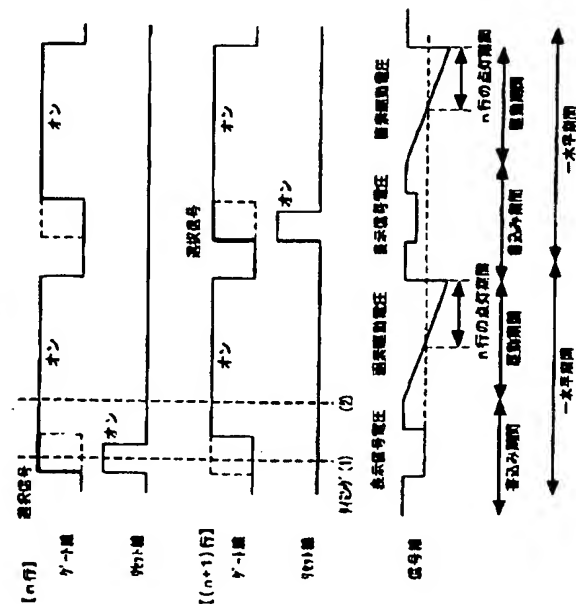
[Number of appeal against examiner's decision
of rejection]

[Date of requesting appeal against examiner's
decision of rejection]

[Date of extinction of right]

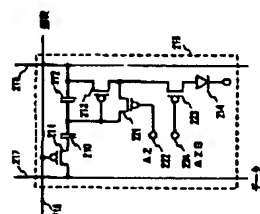
[52]

54

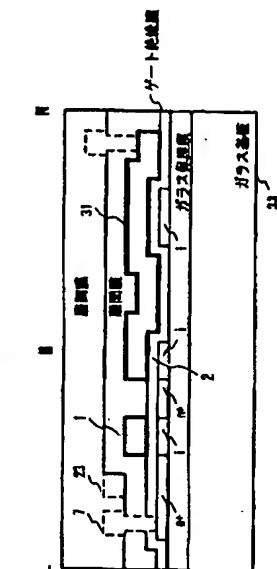


(b)(7)(C)

217

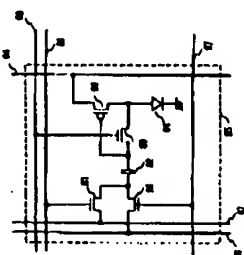


[४३]

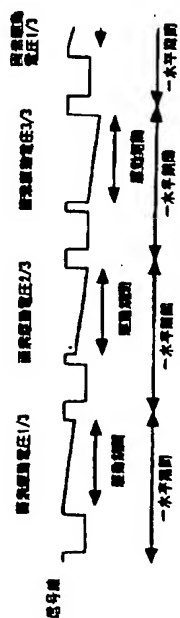


[K13]

013

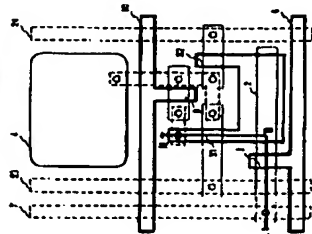


【54】



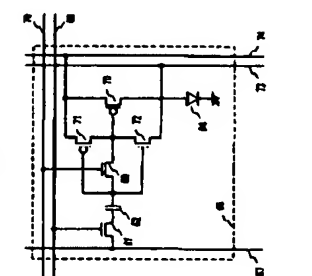
【7.21】

圖 7



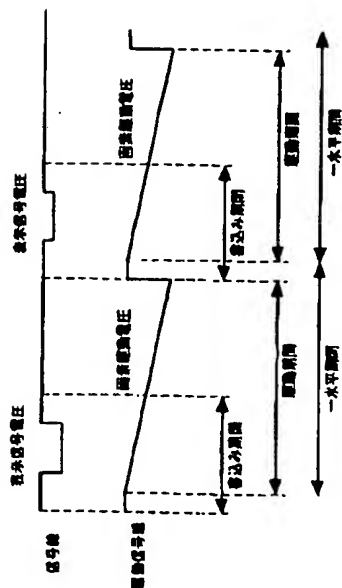
[212]

12



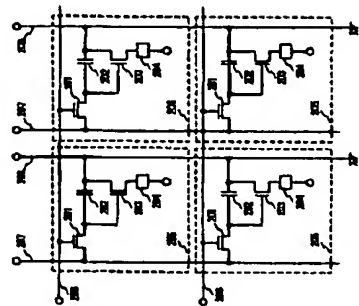
【図14】

図14



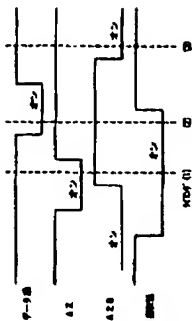
【図16】

図16



【図18】

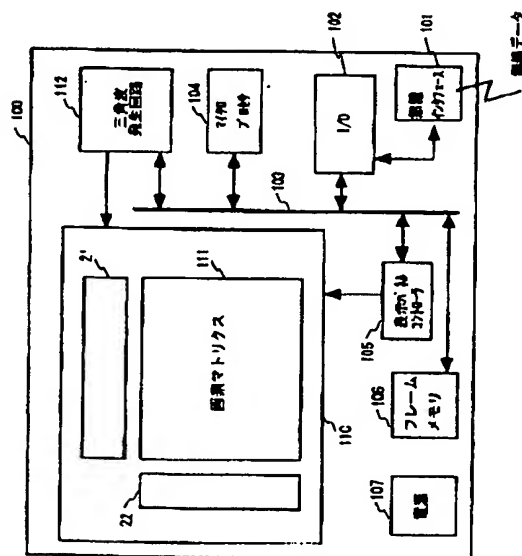
図18



フロントページの図

【図15】

図15



(5) In. Cl. FI 発明者 清水 寛

G09G 3/20 624B 642A A J

1101L 33/00 H01L 33/00

(72) 発明者 小村 真一

茨城県日立市大みか町七丁目1番1号 株

式会社日立製作所日立研究所内

(72) 発明者 佐藤 敏浩

千葉県流山市新3300番地 株式会社日立

製作所ディスプレイズグループ内

(72) 発明者 奥山 寛

東京都分市東芝ケ値... 日立280番地

株式会社日立製作所中央研究所内

(72) 発明者 清水 寛

東京都分市東芝ケ値... 日立280番地

株式会社日立製作所中央研究所内

Fターム(参考) 5C08 A06 A07 B05 D05 E28

FF11 JJ02 JJ03 JJ04 JJ05

JJ06

5C09 A03 B426 C419 E404

E407 E802 F801

5F041 B806 B824 B826 B833 C445

FF06